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In continuation of a long tradition. A brief history of the journals of the Hamburg Natural History Museum

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Abstract

Not only the natural history collections in Hamburg, but also the museum's journals look back at a long tradition. The journal was established as annual report given by its first full-time director Alexander Pagenstecher on the activities of the *Naturhistorisches Museum* in Hamburg, starting with its first volume in the year 1884. Being at that time part of the "*Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten"*, i.e. the annual report of all research institutes of the city state of Hamburg, it was in 1894 re-named *"Mitteilungen aus dem Naturhistorischen Museum in Hamburg"*, only settling in gradually during the second decade of its existence on this long used title. An overview is given for the changing titles of the total of 106 volumes published in 126 years, correlated to and mirroring in some way the fate of the museum collections, until this long tradition terminated in the year 2010. Five years later also a second journal founded at the Zoological Museum in 1952, viz. the *„Entomologische Mitteilungen aus dem Zoologischen Museum Hamburg"*, terminated its publication. Fusing these two former *"Mitteilungen"*, the journal "*Evolutionary Systematics*" is launched now at the Center of Natural History, itself founded in October 2014 at the Universität Hamburg, as a renewed and modern scientific online journal with open access, aiming for the next generation of publications on collection-based research also from other museum and university collections, as well as from a wide range of scientific areas devoted to whole-organism biology.

Key Words

"Mitteilungen aus dem Hamburgischen Zoologischen Museum und Institut"
„Entomologische Mitteilungen aus dem Zoologischen Museum Hamburg"
Alexander Pagenstecher
Karl Kraepelin
Centrum für Naturkunde
Evolutionary Systematics

Introduction

Even more than the museum's journal, the natural history collections in Hamburg look back at a great tradition; for a detailed account see e.g. Glaubrecht (2017) and the references to the older literature therein. Founded in 1843 with the indispensable help of the *Naturwissenschaftlicher Verein*, these collections in Hamburg were built as civic foundation, i.e. they were established by entrepreneurs, merchants, captains and other sea-men of the Hanseatic city of Hamburg, who helped to bring back natural history objects and collections from all regions of the fast changing world of that time of European expansion, exploration and exploitation. Thus, in contrast to many other collections started as *Wunderkammer*, or curiosity cabinets, of regional kings and other dignitaries, as for example the royal institutions in Berlin or Munich, the Hamburg collections originated from the initiative and interest in natural history of some of its civilians, merchandisers, traders and owners of seagoing vessels.

On 17 September 1891, after nearly half a century of efforts and struggle for an own building and after nearly a decade of planning and constructing, the *Naturhistorische Museum* opened at Steintorwall, close to Lake Alster in the inner city of Hamburg, designed in Italian renaissance style by the architects Manfred Semper and Carl Philipp

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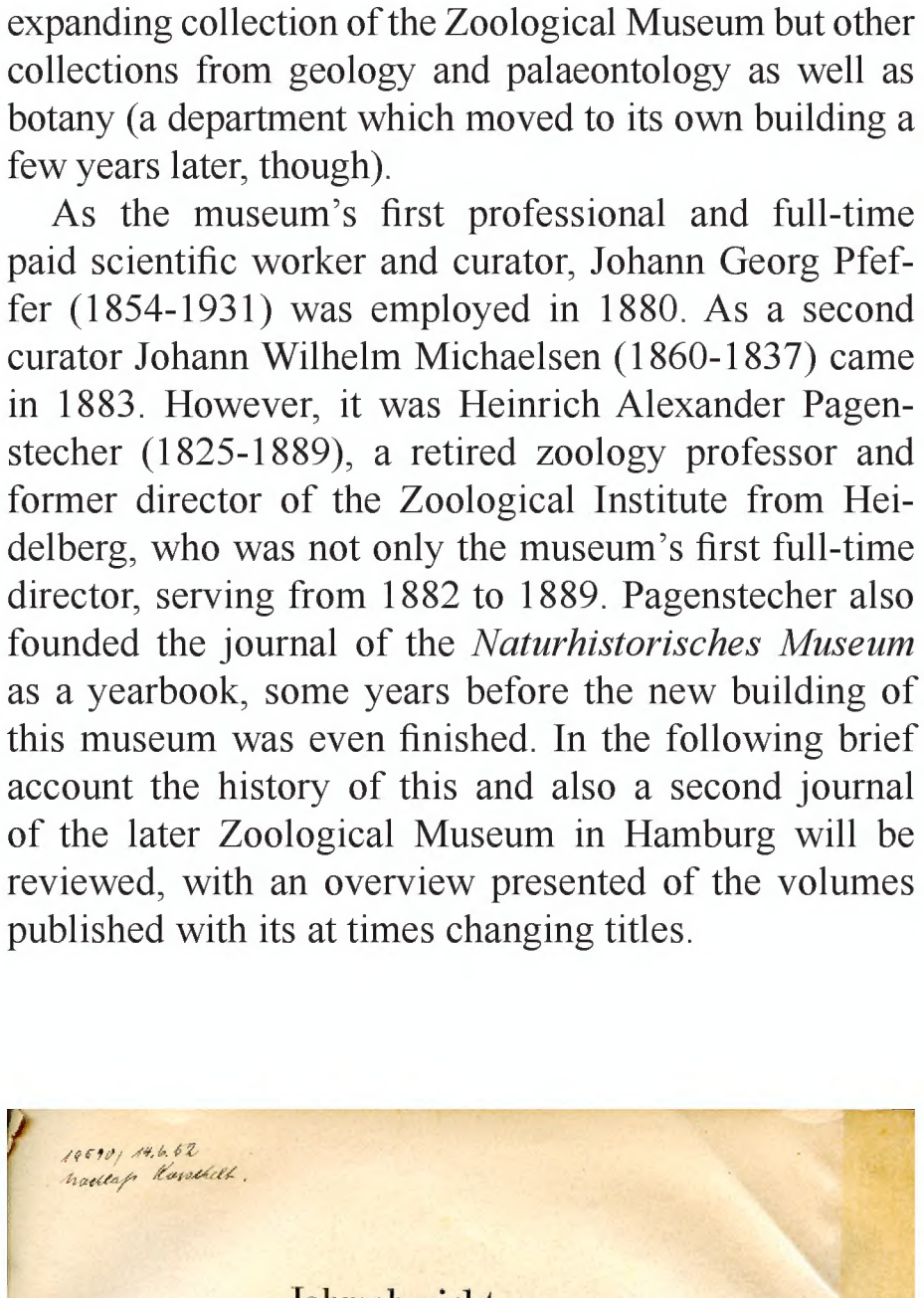
Krutisch, with 100 m in length, 36 m width and 32 m height, and with open galleries surrounding the major hall or *Lichthof*. The new museum was located adjacent to the later main train station, where it formed part of a museum assemblage together with the Hamburg *Kunsthalle* and the *Museum für Kunst und Gewerbe*. This building at that time and for years to come not only accommodated the expanding collection of the Zoological Museum but other collections from geology and palaeontology as well as botany (a department which moved to its own building a few years later, though).

As the museum's first professional and full-time paid scientific worker and curator, Johann Georg Pfeffer (1854-1931) was employed in 1880. As a second curator Johann Wilhelm Michaelsen (1860-1837) came in 1883. However, it was Heinrich Alexander Pagenstecher (1825-1889), a retired zoology professor and former director of the Zoological Institute from Heidelberg, who was not only the museum's first full-time director, serving from 1882 to 1889. Pagenstecher also founded the journal of the *Naturhistorisches Museum* as a yearbook, some years before the new building of this museum was even finished. In the following brief account the history of this and also a second journal of the later Zoological Museum in Hamburg will be reviewed, with an overview presented of the volumes published with its at times changing titles.



Jahresbericht

über das

Naturhistorische Museum

zu Hamburg

für das Jahr 1882

erstattet

von

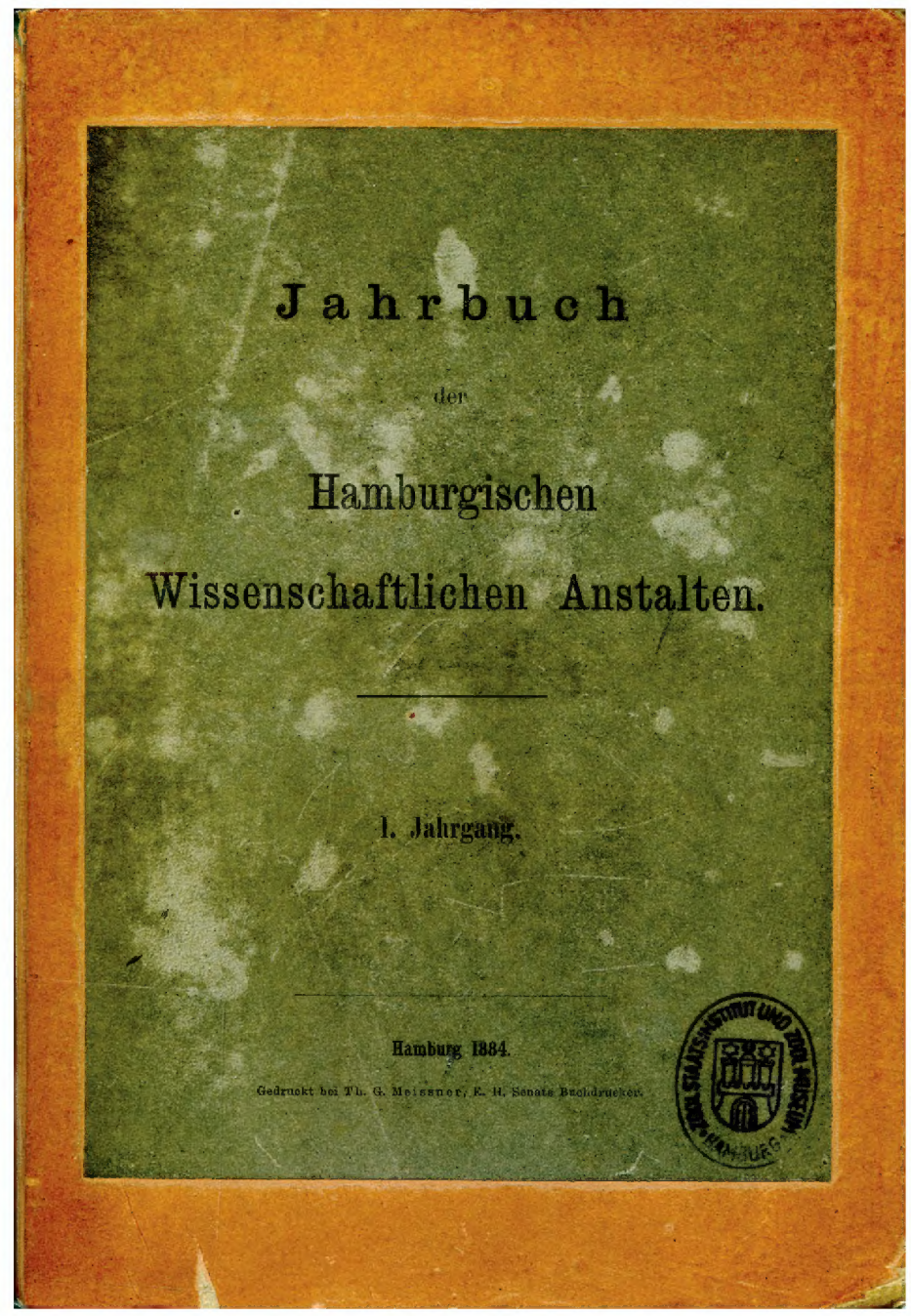
Director Dr. *Pagenstecher.*

Aus dem Osterprogramm des Akademischen Gymnasiums.

Hamburg, 1883.

Gedruckt bei Th. G. Meissner, Eines Hohen Senates, wie auch des Gymnasiums und Johanneums Buchdrucker.

Figure 1. Title page of the "*Jahresbericht über das Naturhistorische Museum zu Hamburg für das Jahr 1882*", given as first annual report by the director Alexander Pagenstecher, published in 1883.



Jahrbuch

der

Hamburgischen

Wissenschaftlichen Anstalten.

1. Jahrgang.

Hamburg 1884.

Gedruckt bei Th. G. Meissner, E. H. Senats Buchdrucker.

Figure 2. Title page of the *"Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten"*, published in September 1884, as first volume of a periodical journal from the Natural History Museum in Hamburg.

The "*Mitteilungen*" of the Natural History Museum

The journal was first established as an annual report on the activities of this museum, viz. as "*Jahresbericht über das Naturhistorische Museum zu Hamburg für das Jahr 1882"*, given by its director Alexander Pagenstecher and published in the following year 1883 as part of the so-called *"Osterprogramm des Akademischen Gymnasiums*", as is evident from the title page (see Fig. 1). This first report essentially listed the newly acquainted objects and species for the museum collection; but from page 6 on also published the official administrative and organizational regulations for the museum, its director, curator, and advisory board. It was followed by a single separate article (of 16 pages plus one plate of illustrations) with the descriptions of new reptiles by J. G. Fischer.

Such reports became obligatory for all those "*wissenschaftliche Anstalten*", or scientific institutions, which were from 1883 on under the rule of the "*Oberschulbehörde"*, or supervisory school authority of Hamburg, and which had their origin in the mentioned Academic Gymnasium, such as for example the Botanical Garden, the *Sternwarte,* or observatory, as well as other scien-

tific institutes and museums for ethnography, art etc. However, it was exactly 133 years ago, in September 1884, when the first numbered volume of a periodical journal was printed and distributed as "*Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten"*, i.e. the annual report of all research institutes of the city state of Hamburg (Fig. 2). It has to be noted that for quite some decades to come there was no university established in Hamburg (it was founded only in 1919). Thus, natural science as well as other academic activities where delegated to state-owned institutions at that time. Between 1884 and 1892 this "*Jahrbuch*" was published annually in ten volumes, each also holding the annual report of the acting director of the Natural History Museum, again followed by scientific articles.

The eleventh and twelfth volume appeared only after an interruption in 1894 and 1895, respectively, as "*Beiheft zum Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten*". In the following two years (1896-97) volume XIII and XIV were, for the first time, published under the title "*Mitteilungen aus dem Naturhistorischen Museum in Hamburg*", which was used then for all subsequent volumes and years from 1900 on until the year 1915 (volume XVII to XXXII). Note that Kraepelin (1901: 130) mentioned, obviously in error, that these reports started already in the year 1889 (when he took over as director) to be published under the title "*Mitteilungen aus dem Naturhistorischen Museum*". This title for the journal was only briefly replaced in the years 1898 and 1899 for two volumes (XV and XVI) by "*Zoologische Abhandlungen, Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten*". It appears as if the museum and its editors tinkered at this early stage of the journal not only with the type and content of their annual reports but also with the proper title, only settling in during the second decade of its existence on the then long used title "*Mitteilungen*", which at the same time was in German institutions certainly the most commonly used name of institutional journals. For a survey of the changing titles and volumes published see Table 1.

This development of its journal in a way reflects the institution's settlement at that time. Following Pagenstecher in April 1889 as second director, Karl Matthias Kraepelin (1848-1915) over the next two decades to come made the Hamburg Natural History Museum an internationally renown research institution. Kraepelin, who before was a professor at the Hamburg *Johanneum* teaching there since 1878, was extremely successful in building up the museum's global collections through private donations and in context with the colonial movement. Within less than a decade, from 1891 to 1899, the museum holdings nearly doubled, with an increase of about 15.000 catalogue numbers or c. 60.000 specimens per year, as Kraepelin (1899: 10-11; 1901: 132) himself reported. No doubt that he should be remembered as more than just a "local talent" (Nyhart 2009), since Kraepelin was recognized not only for his commitment to reform science education in schools, but was also a distinguished naturalist specialized in the study of scorpions, centipedes and spiders (see Glaubrecht 2017). In his account on the museum goals, Kraepelin (1899) explicitly named, next to geographical distribution, zoological systematics as "*die wissenschaftliche Hauptaufgabe*", or the main task of his museum. In addition, with Kraepelin promoting the modern dual arrangement of separating research collections from exhibitions, the Hamburg Natural History Museum was visited by an average of 140.000 people per year. Kraepelin was among those museum scientists who saw it as their role to present evolution to a broad audience through new public exhibits and to conduct research related to the history of life (Nyhart 2009: 26). We need to remember that at that time the Hamburg museum was, together with the Museum für Naturkunde in Berlin, the leading German research institution of its kind, presenting a newly and biology based picture of nature and of zoological research, with its holdings being an archive containing the records of natural history and with systematics playing an important role (Nyhart 2009: 239-240; Glaubrecht 2017). As Kraepelin (1901) mentioned, in this context also the museum's journal took an important role, not only in reporting on scientific issues and findings, but also in the important library exchange with many other institutions, academies, and scientific societies on an national and international scale.

In 1914 Kraepelin (who died a year later) was followed as director by the zoologist Hans Lohmann (1863-1934), who had an expertise in polar plankton research and who became also the first professor of zoology at the newly founded University of Hamburg in 1919 (to which the museum, however, did not belong until 1969). With the museum's name changed into *Zoologisches Museum* the same year, also the "*Mitteilungen aus dem Naturhistorischen Museum*" altered its name to "*Mitteilungen aus dem Zoologischen Museum*", starting with volume XXXII and XXXIII in 1915 and 1916, respectively. With volume XXXIX in the year 1922 the title changed again slightly to "*Mitteilungen aus dem Zoologischen Staatsinstitut und Zoologischen Museum in Hamburg*" for the next eight volumes, published during the years 1923 to 1936 (with no volumes published in the years 1927, 1929-30 and 1932-34). Note that Roman numbers were replaced by Arabic numbers in the volume counting in 1925 with volume 41 (see Table 1).

In 1934, as forth director, Berthold Klatt (1885-1958) followed Lohmann, who retired and died the same year. For obvious reasons the 1930s and 1940s were times of quite irregular appearance of the museum journal, with only three annual reports being published in the years 1938, 1939 and 1944. The years before, during and after World War II were clearly disruptive also to the continuation of the journal, especially affecting the years until 1949; as was also true, for example, for the journal of the Berlin natural history museum (see Glaubrecht et al. 2008).

Table 1. The Hamburg natural history journal, published by the *Naturhistorisches Museum* and later the Zoological Museum in Hamburg, respectively; with its changing titles and volume numbers published from 1883 to 2010, as well as the periods of acting directors and later curators functioning as journal editors.

Title	Volume	Year of Publication	Acting Director or Editor
Jahresbericht über das Naturhistorische Museum zu Hamburg für das Jahr 1882		1883	1882–1889 H. A. Pagenstecher
Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten	I.	1884	
	II.	1885	
	III.	1886	
	IV.	1887	
	V.	1888	
	VI.	1889	1889–1914 K. M. Kraepelin
	VII.	1890	
	VIII.	1891	
	IX.	1892	
	X.	1893	
Beiheft zum Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten	XI.	1894	
	XII.	1895	
Mitteilungen aus dem Naturhistorischen Museum in Hamburg. Beiheft zum Jahrbuch der Hamburgischen Wissenschaftlichen Anstalten	XIII.	1896	
	XIV.	1897	
	XV.	1898	
	XVI.	1899	
	XVII.	1900	
	XVIII.	1901	
	XIX.	1902	
	XX.	1903	
	XXI.	1904	
	XXII.	1905	
	XXIII.	1906	
	XXIV.	1907	
	XXV.	1908	
	XXVI.	1909	
	XXII.	1910	
	XXIII.	1911	
	XXIX.	1912	
	XXX.	1913	
	XXXI.	1914	
Mitteilungen aus dem Naturhistorischen (Zoologischen) Museum in Hamburg	XXXII.	1915	1915–1933 H. Lohmann
Mitteilungen aus dem Zoologischen Museum in Hamburg	XXXIII.	1916	
	XXXIV.	1917	
	XXXV.	1918	
	XXXVI.	1919	
	XXXVII.	1920	
	XXXVIII.	1921	
Mitteilungen aus dem Zoologischen Staatsinstitut und Zoologischen Museum in Hamburg	XXXIX.	1922	
Mitteilungen aus dem Zoologischen Staatsinstitut und Museum in Hamburg	XL.	1923	
	41	1925	
	42	1926	
	43	1928	
	44	1931	
	45	1935	1934–1955 B. Klatt
	46	1936	
Mitteilungen aus dem Hamburgischen Zoologischen Museum und Institut	47	1938	
	48	1939	
	49	1944	
	50	1950	
	51	1952	
	52	1953	

Title	Volume	Year of Publication	Acting Director or Editor
Mitteilungen aus dem Hamburgischen Zoologischen Museum und Institut	53	1955	1955–1969 K. Kosswig
	54	1956	
	55	1957	
	56	1958	
	57	1959	
	58	1960	
	59	1961	
	60	1962	
	61	1963	
	62	1964	
	63	1966	
	64	1967	
	65	1968	
	66	1969	
	67	1970	
	68	1971	
	69	1972	
	70	1973	
	71	1974	
	72	1975	
	73	1976	
	74	1977	
	75	1978	*Schriftleitung* Dr. Gisela Rack
	76	1979	
	77	1980	
	78	1981	
	79	1982	
	80	1983	
	81	1984	
	82	1985	
	83	1986	
	84	1987	*Schriftleitung* Dr. Heinrich Hoerschelmann & Dr. Hans-Georg Andres
	85	1988	
	86	1989	
	87	1990	
	88	1991	
	89	1992	
	90	1993	*Redaktionsbeirat* or *Herausgeber* Zoologisches Museum
	91	1994	
	92	1995	
	93	1996	
	94	1997	
	95	1998	
	96	1999	
	97	2000	
	98	2001	
	99	2002	
	100	2003	
	101	2004	
	102	2005	
	103	2006	*Herausgeber* Dr. Thomas M. Kaiser
	104	2007	
	105	2008	
	106	2009/2010	

ENTOMOLOGISCHE MITTEILUNGEN
aus dem
Zoologischen Staatsinstitut u. Zoologischen Museum
Hamburg
Herausgeber: Privatdozent Dr. Herbert Weidner
1952 Hamburg Nr. 1

Eine botanisch-zoologische Exkursion in den Kaiserstuhl

Von
Prof. Dr. H. Engel
(Staatsinstitut für Allgemeine Botanik Hamburg)
und
Dr. H. Weidner
(Zoolog. Staatsinstitut u. Zoolog. Museum Hamburg)

Figure 3. Title page of the "*Entomologische Mitteilungen aus dem Zoologischen Museum Hamburg*", founded in 1952 by Herbert Weidner.

New beginning as journal of the Zoological Museum

Due to the bombing of Hamburg's inner city during the so-called "Operation Gomorrha", also its *Naturhistorisches Museum* was destroyed end of July 1943. However, parts of the collection have been rescued thanks to translocating them in time to underground deposits; see Glaubrecht (2017) and references therein for more details. Following the years of war and post-war change and upheaval, the journal took only flight again as "*Mitteilungen aus dem Hamburgischen Zoologischen Museum und Institut*" in the year 1950, with its 50th volume. This title has been in use since volume 47 in the year 1938 (see Fig. 4). For more than half a century to come this journal was then continuously and regularly published, with many results on taxonomic, systematic and morphological research done by scientists of the Zoological Museum or those associated with it one way or the other. The journal continued also when the natural history collection and its staff were formally transferred from an independent research institute of the city state of Hamburg (*Staatsinstitut*) to the University of Hamburg in 1969. It was this year, when the fifth and last director of the Zoological Museum, Curt Kosswig (1903-1982), who served from 1955 to 1969, died. Kosswig had successfully negotiated the building of a new research facility for both the Zoological Museum and the Zoological Institute (that had once been part of the former Natural History Museum) at the newly founded natural science campus at Martin-Luther-King-Platz, to where the collections moved between 1972 and 1976.

For the following three decades to come the Hamburg "*Mitteilungen*" constantly and continuously published important research articles, mainly on taxonomic, faunistic and morphological aspects; for an evaluation of the role of the "*Mitteilungen*" for taxonomy and systematics and in particular on this later period see Schliemann & Dwillo (2003: vii). The journal was published under the editorship of several museum curators, viz. Gisela Rack (since 1978), Heinrich Hoerschelmann and Hans-Georg Andres (since 1987) and from the year 1993 on in various and changing combinations of functional responsibility of an editing "*Redaktionsbeirat*" and "*Referenten*", as is evident from the (inconsequently used) indications printed in the respective volumes.

The long tradition of Hamburg's "*Mitteilungen aus dem Zoologischen Museum und Institut*" finally ended in the year 2010, looking back since 1884 on 106 volumes published over this period of 126 years. This was only shortly after Schliemann and Dzwillo (2003), on the occasion of the centenary volume in the year 2003, celebrated this publication's tradition in their review of the beginning and development of the journal, with about 400 printed copies (in 2001) that were exchanged with major museum and university libraries in Europe, the USA, South Africa, Japan, China and others. However, when Thomas Kaiser took over as editor from Hans Georg Anders in 2006, also this journal had its difficulties in receiving enough acceptable manuscripts, for the many reasons holding true lately for a plethora of museum journals worldwide.

Our journal's long tradition is documented in its volumes still present in many libraries of the major natural history museums, academies and universities around the globe, with which the Hamburg Natural History Museum and later the Zoological Museum, respectively, was in extensive contact and exchange. Most instrumental in reconstructing the impressive history of the journal, however, were those copies still existing in our own museum library in Hamburg; which is astonishing insofar, as most of the original 48 volumes (that were published until then) were destroyed during the bombing in July 1943, together with those other approximately 50.000 books of the library of the *Naturhistorische Museum* (see Glaubrecht 2017). From an authentic and telling document, viz. a letter by the curator of mammals Erna Mohr of early November 1943, we learn that „*von den 48 Bänden unserer eigenen ‚Mit[teilungen] Zool. Mus. Hamburg' habe ich etwa die Hälfte schon wieder zusammengebettelt. Den Rest werden wir auch noch beschaffen*" (cited in Ladiges et al. 1968: 27). Evidently, immediately after the destruction and burning of the museum and library, its

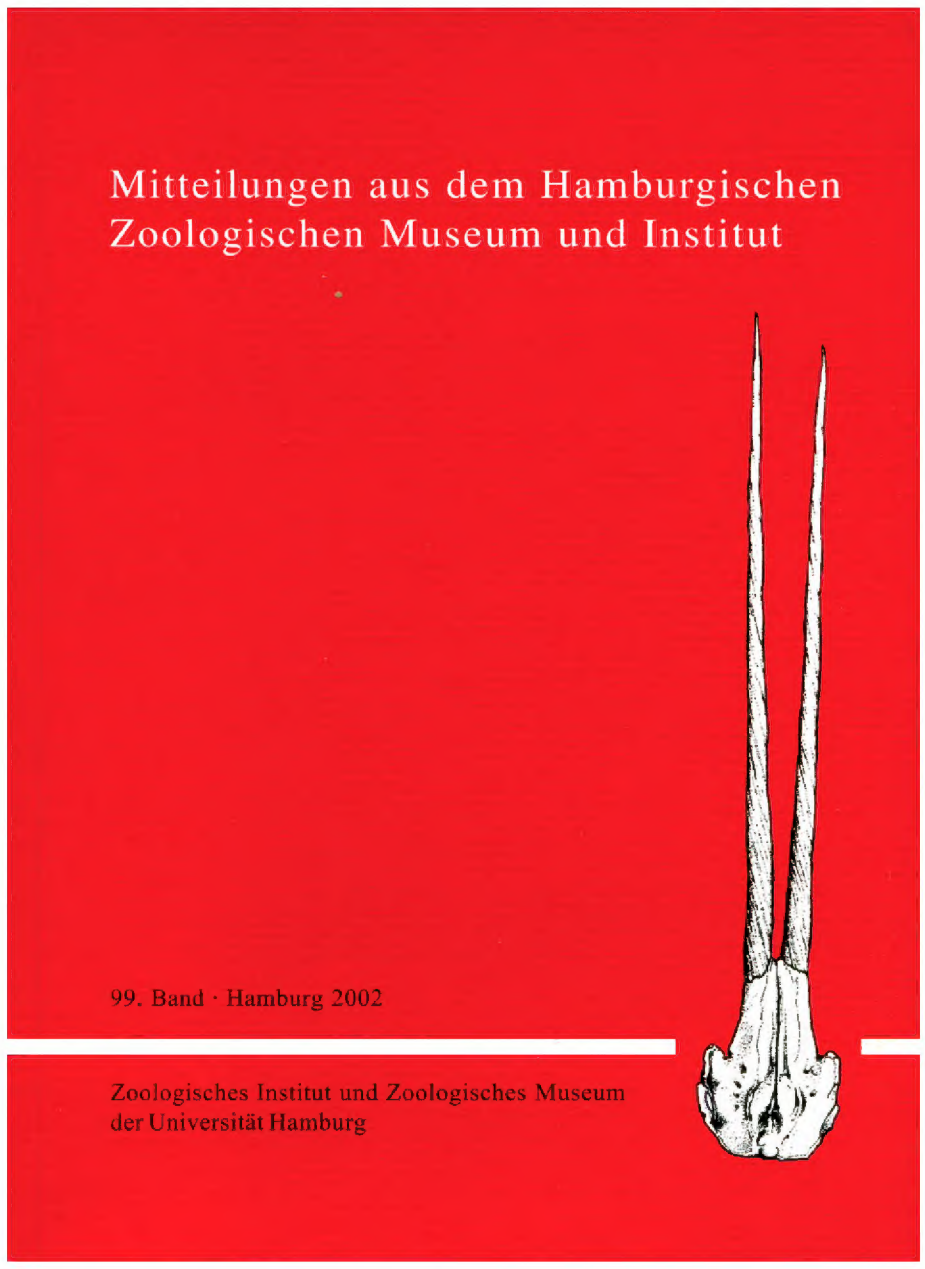

Mitteilungen aus dem Hamburgischen
Zoologischen Museum und Institut
99. Band · Hamburg 2002
Zoologisches Institut und Zoologisches Museum
der Universität Hamburg

Figure 4. Title page of the "*Mitteilungen aus dem Hamburgischen Zoologischen Museum und Institut*", volume 99 of 2002.

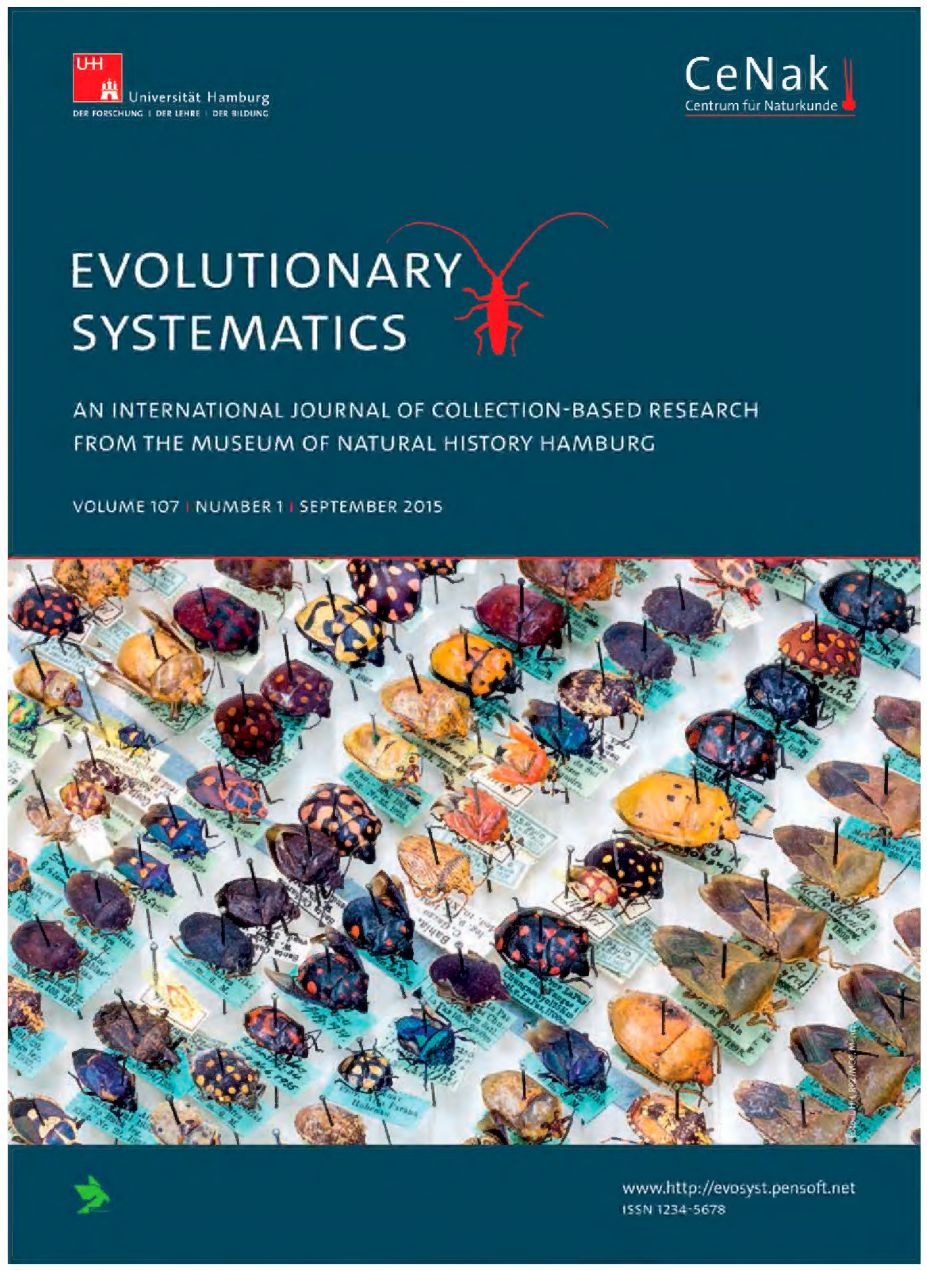


Figure 5. Title page of the newly lanched journal "*Evolutionary Systematics*" in 2017.

curators, and here in particular the mentioned Erna Mohr, were instrumental and highly effective in re-assembling the library holdings including a continuous series of all journal volumes of our "*Mitteilungen*".

The second Hamburg museum journal with a considerable, albeit this time post-war history, the „*Entomologische Mitteilungen aus dem Zoologischen Museum Hamburg*", was founded in the year 1952 by the museum curator and entomologist Herbert Weidner (see Fig. 3). For many years under the joint editorship of the entomologists Hans Strümpel and Rudolf Abraham as well as the arachnology curator Hieronymus Dastych, this entomological sister journal published its last issue in the year 2015. An overview and some issues and volumes, respectively, were made available online (https://www.cenak.uni-hamburg.de/uebercenak/journale/entomologische-mitteilungen.html). With both journals, the "*Mitteilungen aus dem Hamburgischen Zoologischen Museum und Institut*" and the „*Entomologische Mitteilungen*", having terminated their publication and thus ended their traditions, and also given the new institutional situation after founding the Center of Natural History (CeNak) at the Hamburg University in October 2014, of which the Zoological Museum became an important and integral part (see Glaubrecht 2017), we allowed also to re-think our journals' publication strategies and aims. Like many other museums and institutions we have to face the fact that small journals run for too long the traditional, long-trotten way are becoming less competitive in a scientific world that requests innovative ways of distribution, involving open access options and, consequently, higher visibility. Thus, we decided to fuse the two former "*Mitteilungen*" and launch with "*Evolutionary Systematics*" a renewed and modern scientific online journal of the Hamburg Center of Natural History (Fig. 5).

Toward *Evolutionary Systematics*

The term "Evolutionary Systematics" was first used, although not explicitly explained or defined, by the German-born Harvard evolutionary biologist and bird systematist Ernst Mayr (1904-2005), in a section of his historical *tour de force* on advances in evolutionary biology, describing the beginnings of resolving the mechanisms involved in the origin of organismic diversity and its horizontal, i.e. geographical components. One of the central aspects for Mayr was the integration of concepts and methods of systematics with the (at that time) young discipline of population genetics as key element of the emerging new and modern synthetical theory of evolution; see for more details Glaubrecht (2007; 2010: 3-10). Accentuating this evolutionary perspective, the research program of evolutionary systematics has then been defined by Glaubrecht (2010: 3), as "the study of organisms on the basis of phylogenetic systematics, combining aspects of taxonomic

diversity, morphological disparity and genetic variability, as well as the underlying evolutionary causes of speciation". Therefore, evolutionary systematics is a research field in biology that combines taxonomy (including nomenclatural aspects) based on descriptive approaches in systematics, phylogeny and biogeography with causal and analytical approaches, as described in more detail in general and illustrated with case studies from freshwater gastropods in Glaubrecht (2010). For recent applications with the goal to assess the diversity of some Crustacea taxa, their phylogenetic systematics, and their phylogeographical history within an Evolutionary Systematics framework see e.g. Schwentner et al. (2014, 2015).

Evolutionary Systematics now also stands as heading for one of the three integrated biodiversity research fields defined as key research areas of the scientists working at the Center of Natural History (CeNak) in Hamburg. Along the lines of a vision on "*Discovering biological diversity – its evolution and future*" developed for the CeNak in close association with its researchers, we continue to combine a special focus on aquatic habitats, from the local River Elbe to the polar regions, as well as on selected terrestrial to limnic taxa from the Australasian tropics to various other regions in the world. This research program rests on three methodological approaches, viz. morphology (including structural and functional analyses and 3D visualisation techniques), molecular genetics (including genomics), as well as biogeographical and ecological modelling. This research program will be supplemented by a biohistory agenda, looking into the history of individual objects as well as taking into focus the historical development of particular collections and entire museums; see for examples of actual research the CeNak website at https://www.cenak.uni-hamburg.de/en/forschung/zoologie.html.

It just seemed consequent, therefore, to name the re-launched journal "*Evolutionary Systematics*" (Fig. 5), aiming for another generation of publications on collection-based research, hopefully not only from the Hamburg Center of Natural History now but also from other museum and university collections, as well as from a wide range of scientific areas devoted to whole-organism biology.

Acknowledgments

The author wishes to thank Harald Schliemann and Martina Mistera (Hamburg) for their indispensable help with surveying the volumes in the Hamburg library and the various and constantly changing titles of what was called "*Mitteilung*" of the Hamburg Natural History and Zoological Museum, respectively, for most of the time of its existence. Harald Schliemann, Andreas Schmidt-Rhaesa and Martin Husemann read and commented on an earlier version of the manuscript, which certainly helped to improve this brief historical account.

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